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Nos. 82-524, 82-545, and 82-551

IN THE

Supreme Court of the United States

OCTOBER TERM, 1982

BALTIMORE GAS AND ELECTRIC CO., *et al.*,
Petitioners,

v.

NATURAL RESOURCES DEFENSE COUNCIL, INC.,
Respondent.

UNITED STATES NUCLEAR REGULATORY COMMISSION, *et al.*,
Petitioners,

v.

NATURAL RESOURCES DEFENSE COUNCIL, INC., *et al.*,
Respondents.

COMMONWEALTH EDISON COMPANY, *et al.*,
Petitioners,

v.

NATURAL RESOURCES DEFENSE COUNCIL, INC., *et al.*,
Respondents.

On Petition for a Writ of Certiorari to the United States Court of Appeals for the District of Columbia Circuit

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BRIEF ON THE MERITS OF PETITIONERS BALTIMORE GAS AND ELECTRIC CO., *ET AL.* IN NO. 82-524

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QUESTIONS PRESENTED FOR REVIEW

1. Whether the National Environmental Policy Act (NEPA) precludes the Nuclear Regulatory Commission (NRC) from disclosing in each environmental impact statement (EIS) the environmental impact that the NRC predicts will result from implementation of its proposed licensing actions, and requires instead that the NRC disclose in each EIS either (1) a spectrum of environmental risks including risks that the Commission has determined are unlikely, or (2) the most severe, remote environmental risk in this spectrum?

2. Whether the lower court improperly construed NEPA to require the NRC to quantify through probabilistic analyses the theoretical environmental impacts that might result from the occurrence of highly improbable future events, and to disclose the results of those probabilistic analyses in each EIS prepared in each licensing proceeding?

3. Whether the lower court improperly substituted its judgment for that of the NRC in invalidating the Original and Interim Rules by dictating that the Commission cannot disclose physical environmental impacts without also explicitly interpreting those impacts in terms of human health and the environment, and by rejecting the Commission's interpretation of these Rules to permit individual licensing boards to consider physical impacts in terms of human health and the environment?

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BRIEF ON THE MERITS OF PETITIONERS BALTIMORE GAS AND ELECTRIC CO., *ET AL.* IN NO. 82-524

OPINIONS BELOW

The opinion of the Court of Appeals in *Natural Resources Defense Council, Inc., et al. v. Nuclear Regulatory Commission, et al.*, Nos. 74-1586, 77-1448, 79-2110, 79-2131 (D.C. Cir. April 27, 1982) was officially reported at 685 F.2d 459. The slip opinion is reproduced at *Pet. App.* 1a-181a.[1]

JURISDICTION

The judgment of the Court of Appeals for the D.C. Circuit was entered on April 27, 1982. Timely Petitions for Rehearing and Suggestions for Rehearing en Banc were denied on June 30, 1982 (*Pet. App.* 188a-189a). Baltimore Gas and Electric Company, *et al.*'s [2] petition

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[1] Citations to "*Pet. App.*" refer to the Appendix to Petitions for a Writ of Certiorari to the United States Court of Appeals for the District of Columbia Circuit filed by Baltimore Gas and Electric Co., *et al.* on September 24, 1982. An identically paginated appendix was also filed by Commonwealth Edison Company, *et al.* Citations

for a writ of certiorari was filed within 90 days of that date on September 24, 1982. That petition, as well as petitions filed by the Nuclear Regulatory Commission and the United States and by Commonwealth Edison Company, *et al.*, were granted on November 29, 1982 and consolidated for oral argument. This Court's jurisdiction is invoked under 28 U.S.C. § 1254(1) (1976).

STATUTORY AND REGULATORY PROVISIONS INVOLVED

The following statutory and regulatory provisions are set forth in the Appendix to the Petitions for a Writ of Certiorari:

1. Administrative Procedure Act, §§ 4, 10(e), 5 U.S.C. §§ 553, 706 (1976) (*Pet. App.* 391a-393a).

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to "*J.A.*" refer to the Joint Appendix filed with these briefs on the merits.

[2] Baltimore Gas and Electric Co., *et al.* were respondent-intervenors in Case Nos. 74-1586, 77-1448, 79-2110, and 79-2131 below. A list including the names of the companies which comprise petitioners Baltimore Gas and Electric Co., *et al.*, and all parent companies, subsidiaries, and affiliates is contained in the appendix to Baltimore Gas and Electric Co., *et al.*'s petition for a writ of certiorari pursuant to Rule 28.1 of this Court, as supplemented at page 2, footnote 2 of their reply brief.

Other parties to the proceeding below are described in this footnote. The Natural Resources Defense Council, Inc. was the petitioner in Case Nos. 74-1586, 77-1448, and 79-2131; Consolidated National Intervenors were petitioners in Case No. 74-1586; and the State of New York was the petitioner in case No. 79-2110. The United States Nuclear Regulatory Commission and the United States of America were respondents in all of these proceedings. Pacific Legal Foundation was a respondent-intervenor in No. 77-1448; the State of Wisconsin was an intervenor in No. 79-2110; and Tennessee Valley Authority was a respondent-intervenor in Nos. 79-2110 and 79-2131. Commonwealth Edison Co., The Detroit Edison Company, Exxon Nuclear Company, Inc., Niagara Mohawk Power Corporation, Omaha Public Power District, Power Authority of the State of New York, Public Service Company of Indiana, Inc., and Rochester Gas and Electric Corporation were respondent-intervenors in Nos. 77-1448, 79-2110, and 79-2131.

2. Atomic Energy Act of 1954, §§ 1-3, 161, 42 U.S.C. §§ 2011-2013, 2201 (1976) (*Pet. App.* 394a-413a).

3. National Environmental Policy Act of 1969, §§ 101, 102, 42 U.S.C. §§ 4331, 4332 (1976) (*Pet. App.* 430a-434a).

4. 39 Fed. Reg. 14,191, *et seq.* (April 22, 1974) (Original Table S-3 Rule) (*Pet. App.* 237a-239a).

5. 42 Fed. Reg. 13,805, *et seq.* (March 14, 1977) (Interim Table S-3 Rule) (*Pet. App.* 254a-258a).

6. 44 Fed. Reg. 45,371, *et seq.* (August 2, 1979) (Final Table S-3 Rule) (*Pet. App.* 378a-383a).

STATEMENT OF THE CASE

This case arises out of regulations adopted by the Nuclear Regulatory Commission and its predecessor, the Atomic Energy Commission.[3] The regulations, known as the "Table S-3 Rule," set forth the estimated environmental impacts associated with the offsite production and disposal of the uranium fuel that an individual nuclear power plant consumes.[4] The fuel cycle impacts, set forth

[3] The Atomic Energy Commission (AEC) was abolished by the Energy Reorganization Act of 1974, 42 U.S.C. §§ 5801-5891 (1976), which also created the Nuclear Regulatory Commission (NRC) and transferred to it the AEC's licensing and regulatory functions, 42 U.S.C. §§ 5814(a), (f), 5841, *Pet. App.* 415a, 419a-422a. Hereinafter, "Commission" applies to both the AEC and the NRC.

[4] Uranium fuel for nuclear power plants is produced, used, and reclaimed in a multistep "fuel cycle" ending with the disposal of residual wastes. The steps in the complete uranium fuel cycle include mining and milling of uranium ore, its chemical conversion to a usable form, its enrichment in fissionable isotopes of uranium, its fabrication into fuel, its fissioning in a reactor to produce power, reprocessing of spent fuel, disposal or management of radioactive waste, and associated transportation links. Of these steps only fissioning of fuel and temporary storage of spent fuel and waste take place at nuclear power plants. The other activities in the fuel cycle occur elsewhere and are subject to stringent licensing requirements distinct from those governing nuclear power plants.

in 10 C.F.R. § 51.20(e), Table S-3 (1982),[5] are to be disclosed in the Environmental Impact Statement (EIS) that the National Environmental Policy Act (NEPA) requires the NRC to prepare for each nuclear power plant licensing application.

The Table S-3 Rule is the product of three Commission rulemaking proceedings. Either it or its two predecessors have been before the Court of Appeals for the District of Columbia Circuit twice[6] and were previously before this Court in *Vermont Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519 (1978). The following sections discuss the statutory basis for the Table S-3 Rule, summarize the NRC rulemaking proceedings, and describe the decision of the court below which set aside the Rule.

I. Statutory Background

Nuclear power plants are probably the most regulated industrial facilities in this country. The Atomic Energy Act of 1954 (the "AEA"), 42 U.S.C. §§ 2011, *et seq.* (1976), serves as the primary source of the NRC's regulatory authority. It creates a comprehensive scheme for the development and use of nuclear power in a manner consistent with public health and safety.

Given the evolving technology and multitude of complex scientific questions associated with nuclear power, the regulatory scheme created by the AEA "is virtually unique in the degree to which broad responsibility is

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[5] 44 Fed. Reg. 45,371-73 (1979), *Pet. App.* 378a-383a. In November 1972, the Commission began what was to become a series of rulemakings to collect and summarize information on the environmental effects of each offsite step in the uranium fuel cycle associated with annual operation of an individual nuclear power plant. The results of these rulemakings, crystallized in Table S-3, have been used in more than 90 individual environmental impact statements prepared as part of the NRC's review of every proposed nuclear power plant.

[6] NRDC v. NRC, 685 F.2d 459 (D.C. Cir. 1982) (hereinafter *"NRDC II"*), *Pet. App.* 1a-181a; NRDC v. NRC, 547 F.2d 633 (D.C. Cir. 1976), *rev'd sub nom.* Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519 (1978) (hereinafter *"NRDC I"*).

reposed in the administering agency, free of close prescription in its charter as to how it shall proceed in achieving the statutory objectives." [7] Thus, the Commission is given broad authority to fill out the substance of the particular statutory directive,[8] including the discretion to decide whether to resolve a matter through generic rulemaking or individual proceedings.[9]

NEPA supplements the Commission's authority under the AEA; it does not "increase, decrease, or change any responsibility or authority [of the Commission]." [10] NEPA provides that all Federal agencies, including the NRC, must "[t]o the fullest extent possible," include in proposals for "major Federal actions significantly affecting the quality of the human environment:"

> [A] detailed statement by the responsible official on
>
> (i) the environmental impact of the proposed action, [and]

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[7] Siegel v. AEC, 400 F.2d 778, 783 (D.C. Cir. 1968); *see* Power Reactor Development Co. v. International Union of Electrical, Radio & Machine Workers, 367 U.S. 396 (1961). The Atomic Energy Act, like many other administrative statutes (*see generally* Industrial Union Dep't, AFL-CIO v. Hodgson, 499 F.2d 467, 470 (D.C. Cir. 1974)), sets forth only general policy objectives for regulation and establishes a basic procedural framework for the promulgation of standards.

[8] *See* People of the State of Illinois v. NRC, 591 F.2d 12, 15-16 (7th Cir. 1979); Public Service Co. of New Hampshire v. NRC, 582 F.2d 77, 82 (1st Cir.), *cert. denied*, 439 U.S. 1046 (1978); *Industrial Union Dep't*, 499 F.2d at 474; *see also* Mobil Oil Corp. v. FPC, 483 F.2d 1238, 1257 (D.C. Cir. 1973).

[9] Atomic Energy Act of 1954, § 161(p), 42 U.S.C. § 2201(p) (1976); *see Vermont Yankee*, 435 U.S. at 544-45; Minnesota v. NRC, 602 F.2d 412, 417 (D.C. Cir. 1979); NLRB v. Bell Aerospace Co., 416 U.S. 267, 292-95 (1974), *overruled on other grounds sub nom.* NLRB v. Hendricks County Rural Electric Membership Corp., 454 U.S. 170 (1981); SEC v. Chenery Corp., 332 U.S. 194, 203 (1947).

[10] H.R. Rep. No. 765, 91st Cong., 1st Sess. 9, *reprinted in* 1969 U.S. CODE CONG. & AD. NEWS 2767, 2770; 115 CONG. REC. 19,009 (1969); *see* National Environmental Policy Act of 1969, § 105, 42 U.S.C. § 4335 (1976); *Vermont Yankee*, 435 U.S. at 548.

> (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented . . . .

National Environmental Policy Act of 1969, § 102(2)(C), 42 U.S.C. § 4332(2)(C) (1976), *Pet. App.* 430a.

NEPA thus requires agencies, in considering proposed (*i.e.*, future) actions, to exercise their expert judgment to predict the "environmental impact of [the] . . . proposed action" and its "adverse environmental effects which cannot be avoided" (hereinafter referred to as "environmental impact"). In other words, NEPA mandates that agencies attempt to determine what will happen to the environment if a proposal is implemented. Where actual experience is available with respect to the proposed action, a prediction concerning the environmental impact of the proposal may be relatively straightforward. Where there is little experience to serve as a guide, however, NEPA still requires the agency to attempt to foresee what the impact of the proposed action will be in the face of that uncertainty. Accordingly, to fulfill their NEPA responsibilities, agencies must assess "such facts as are available and [make] rational predictions about how currently unanswerable questions will some day be answered." [11]

Once an agency has exercised its expert judgment to predict the future environmental consequence of its proposal, that prediction must be disclosed as the "environmental impact" in the EIS prepared by the agency. The EIS then follows the proposed action through each step in the agency's review process, assuring consideration of the environmental impact of the proposal at all levels of the agency.[12]

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[11] *NRDC II*, 685 F.2d at 534 (Wilkey, J., dissenting), *Pet. App.* 157a; *see* Amoco Oil Co. v. EPA, 501 F.2d 722, 741 (D.C. Cir. 1974); Scientists' Institute for Public Information v. AEC, 481 F.2d 1079, 1092 (D.C. Cir. 1973); *Industrial Union Dep't*, 499 F.2d at 474.

[12] Section 102(2)(C) of NEPA requires "[c]opies of such statement . . . shall accompany the proposal through the existing agency review processes . . . ." 42 U.S.C. § 4332(2)(C), *Pet. App.* 432a.

II. The Table S-3 Rule

The activities conducted at each offsite step in the uranium fuel cycle create, or are expected to create, environmental impacts. Since these impacts indirectly result from the operation of individual power plants, the Commission concluded that it was obligated by NEPA to identify the fuel cycle impacts attributable to an individual plant and disclose them in the licensing proceeding for that plant.[13] Having concluded that fuel cycle impacts needed to be disclosed in the EIS prepared for a power plant, the NRC was confronted with the question of whether the complex questions involved in determining fuel cycle impacts should be addressed generically through rulemaking or should be resolved by each licensing board on a case-by-case basis. The Original Rule and its successors are the product of the Commission's decision to identify offsite fuel cycle environmental impacts in a generic proceeding.[14]

A. The Table S-3 Rulemaking

In 1972, the Commission initiated a rulemaking governed by § 553 of the Administrative Procedure Act (*Pet. App.* 391a).[15] The purpose of the rulemaking was

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[13] 44 Fed. Reg. 45,363 (1979), *Pet. App.* 345a.

[14] The Commission's decision to proceed by rulemaking was based on (1) the ongoing and wide-ranging efforts of the NRC to evaluate uranium fuel cycle issues in other proceedings, *see, e.g.*, 44 Fed. Reg. 61,372 (1979); (2) the concern that individual licensing boards did not have as much expertise as the Commission to deal with these complex, generic issues, *see* 44 Fed. Reg. 45,363 (1979), *Pet. App.* 346a; and (3) the desire to avoid unnecessary and possibly inconsistent review of these peripheral issues in each individual licensing proceeding. *See NRDC II*, 685 F.2d at 526-27 (Wilkey, J., dissenting), *Pet. App.* 140a-143a.

[15] 37 Fed. Reg. 24,191 (1972). The Commission has often proceeded generically to resolve issues that are common to all individual nuclear power plant licensing proceedings. *See, e.g.*, 46 Fed. Reg. 57,521 (1981) (acceptance criteria for Anticipated Transients Without Scram); 39 Fed. Reg. 1,001 (1974) (emergency core cooling systems); 39 Fed. Reg. 43,101 (1974) (environmental impact of using mixed oxide fuels). Thus, all parties conceded that the Commission could address the fuel cycle impacts in rulemaking proceed-

to make a conservative prediction regarding the magnitude of offsite fuel cycle environmental impacts and to disclose that prediction in a form that could be inserted into an individual power plant's EIS.[16]

The Commission's conclusions as to the environmental impacts of the uranium fuel cycle are reflected in three versions of the Table S-3 Rule.[17] These conclusions, as embodied in the Final Rule, are the distilled product of over eight years of work, thousands of pages of discovery, prefiled testimony and support documents, more than two weeks of public hearings, and voluminous other comments and rebuttal filings submitted by all interested parties.[18] In addition to these materials, the record be-

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ings. *See Vermont Yankee*, 435 U.S. at 542 n.17; *NRDC I*, 547 F.2d at 643.

[16] *See* 39 Fed. Reg. 14,190 (1974), *Pet. App.* 232a-233a.

[17] The initial Table S-3 Rule ("Original Rule") was promulgated by the AEC on April 22, 1974, 39 Fed. Reg. 14,188, *et seq.* (1974), *Pet. App.* 224a-239a. After the Court of Appeals had vacated those portions of the Original Rule dealing with the reprocessing of spent fuel and disposal or management of radioactive waste (the "back end" of the fuel cycle) in *NRDC I*, and concurrent with this Court's review of that Rule in the *Vermont Yankee* case, the NRC began a new rulemaking to develop additional information on the back end of the uranium fuel cycle. On March 14, 1977, the Commission issued an interim fuel cycle rule ("Interim Rule"), effective for 18 months, to replace the back end portions of the Original Rule. 42 Fed. Reg. 13,803, *et seq.* (1977), *Pet. App.* 240a-258a. After conducting even more extensive proceedings, the Commission published a final fuel cycle rule ("Final Rule") on August 2, 1979. 44 Fed. Reg. 45,362, *et seq.* (1979), *Pet. App.* 341a-390a. The values contained in all three versions of the Rule are substantially the same. The parties to these proceedings have stipulated that the record for review of these rules would consist of all the information developed in support of the Original, Interim, and Final Rules. *See NRDC II*, 685 F.2d at 471 n.39 (Bazelon, J.), *Pet. App.* 19a n.39.

[18] The Original Rule was based on an *Environmental Survey of the Uranium Fuel Cycle*, WASH-1248 (April 1974) and on the record of two days of hearings held on February 1 and 2, 1973.

The Commission's interim rulemaking began on October 18, 1976 when the Commission simultaneously released an approximately

fore the Commission contained two substantial reports prepared by the Hearing Board. These reports contain

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300-page document entitled *Environmental Survey of the Reprocessing and Waste Management Portions of the LWR Fuel Cycle*, NUREG-0116 (October 1976) (hereinafter NUREG-0116), which included detailed discussion and analysis of possible environmental effects of long-term waste repositories and of proposed revisions to the back end of the Table S-3 Rule. The Commission asked for comments on both. 41 Fed. Reg. 45,849 (1976). After receiving comments, the Commission issued in March 1977 an additional document of some 400 pages, exhaustively cataloguing and responding to the various comments offered on NUREG-0116 and the proposed rule. *Public Comments and Task Force Responses Regarding the Environmental Survey of the Reprocessing and Waste Management Portion of the LWR Fuel Cycle, NUREG-0116*, NUREG-0216 (March 1977), (hereinafter NUREG-0216). NUREG-0216 contains several NRC staff responses addressed specifically to the uncertainties surrounding long-term repositories and the reasonableness of NUREG-0116's conclusions thereto. *See, e.g.*, NUREG-0216 at 3-73 to 3-83, 3-89, 3-90 and 3-95.

Following the issuance of the Interim Rule, the Commission instituted an even more extensive proceeding to further address the effects of the back end of the uranium fuel cycle. 42 Fed. Reg. 26,987 (1977). A broad spectrum of interests were represented in these proceedings, including Federal agencies, States, utilities, nuclear industry firms and trade associations, numerous private organizations representing environmental and other constituencies, and individuals participating on their own behalf. 44 Fed. Reg. 45,366 (1979), *Pet. App.* 357a. The procedural framework for the final rulemaking was broadened considerably beyond that leading up to the Original Rule. In addition to opportunities to file testimony and present oral statements at the hearing subject to questioning by the Hearing Board, participants were permitted to file written questions on each other, to seek to conduct cross-examination on specific issues, and to file rebuttal testimony. *Id.* Ten days of live hearings were held before a specially appointed Atomic Safety and Licensing Board ("Hearing Board"), which then filed a detailed set of findings of fact and rationale of decision with the Commission. *See infra* note 19. Finally, the Commission itself held oral argument following the close of proceedings. 44 Fed. Reg. 45,366 (1979), *Pet. App.* 359a-360a.

detailed findings of fact and conclusions and recommendations for the Commission.[19]

The Commission's conclusions are presented in the Table S-3 Rule as values that represent environmental impacts associated with the production and enrichment of uranium ore, the fabrication of mixed oxide fuel, and the disposal of the spent fuel. These values are based on the operation of a standard (1000 megawatt) nuclear power plant.[20] They indicate, for example, the Commission's best judgment as to the land used, energy consumed, and liquid and gaseous emissions associated with the various steps in the uranium fuel cycle for this standard plant.[21]

In accordance with § 102(2)(C) of NEPA, the Table S-3 Rule also requires that, in licensing a plant, the NRC Staff incorporate the environmental impacts disclosed in Table S-3 in the EIS for the particular plant, and that the individual licensing board consider those impacts during the licensing process.[22] Thus, the Table S-3 Rule is a reporting device rather than a decisional document. The Table S-3 rulemaking was intended only to resolve, for the purpose of power plant licensing, what the most likely conservative environmental impacts of the offsite uranium fuel cycle would be, so that these predictions would not have to be revisited in each and every

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[19] Conclusions and Recommendations of the Hearing Board Regarding the Environmental Effects of the Uranium Fuel Cycle, October 26, 1978, *Pet. App.* 274a-338a; Report of the Hearing Board to the Commission, August 31, 1978, *J.A.* 264-280.

[20] In other words, the NRC normalized the values in the Table to reflect the fuel used by a standard, 1,000 MW nuclear power plant. These normalized values can then be scaled up or down in an individual licensing proceeding based on the actual generating capacity of the plant being licensed. 44 Fed. Reg. 45,371-73 (1979), *Pet. App.* 378a-383a.

[21] 44 Fed. Reg. 45,372-73 (1979), *Pet. App.* 380a-383a.

[22] 44 Fed. Reg. 45,371 (1979), *Pet. App.* 378a.

individual power plant licensing proceeding. The Rule did not, nor was it ever intended to, resolve for all time the many outstanding technological and policy issues concerning the development of the specific facilities to be used in any step of the uranium fuel cycle.[23]

B. The "Zero-Release" Value

One prediction in the Table S-3 Rule is at the center of this proceeding—the so-called "zero-release" value per-

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[23] 44 Fed. Reg. 45,363 (1979), *Pet. App.* 347a. The Commission noted that its goal *"was not to produce an exhaustively comprehensive table of precisely accurate figures as to which all uncertainty had been eliminated."* *NRDC II*, 685 F.2d at 528 (Wilkey, J., dissenting) (emphasis in original), *Pet. App.* 143a; *see* 44 Fed. Reg. 45,363 (1979), *Pet. App.* 345a-346a. As the Commission further explained in responding to NRDC comments:

> The point of the rule is to give the licensing board a generic guide for factoring into the cost-benefit balance for the reactor the relatively small contribution of fuel cycle activities. If the rule included uncertainties, as your letter advocates, the licensing board would have to judge for itself from the spectrum of possible effluent release values a particular set most likely to be representative of fuel cycle contributions to the environmental impact of the plant. This judgment, which itself is a generic question, has been performed by the Commission through its choice of the values appearing in Table S-3. The uncertainties underlying these values are acknowledged and discussed in the Statement of Consideration accompanying the rule.

NRC Secretary Letter to NRDC of October 31, 1979, *J.A.* 292-93.

There is an ongoing Federal program for addressing the merits of factual and policy questions about storage of nuclear waste, and Table S-3 can be revised if the outcome of that program shows that the Table S-3 predictions of environmental effects are inaccurate. *See* 44 Fed. Reg. 45,362 (1979), *Pet. App.* 341a. Those proceedings, which focus on different technical issues and address the entire spectrum of waste management issues, include the recently enacted Nuclear Waste Policy Act of 1982, Pub. L. No. 97-425 (Jan. 7, 1983); the Energy Research and Development Administration's (ERDA), and later DOE's, preparation of a generic environmental impact statement for high-level waste management; the NRC's currently ongoing Waste Confidence Proceeding, 44 Fed. Reg. 61,372 (1979); and EPA's effort to promulgate standards for future waste repositories, 47 Fed. Reg. 58,196 (1982). The recently enacted Nuclear Waste

taining to the long-term disposal of spent fuel.[24] This value reflects the Commission's prediction that long-term repositories will be developed which will effectively isolate nonvolatile (*i.e.*, solid) nuclear wastes from the environment.[25] This value itself is not listed in Table S-3, but is included in the summation of values disclosed under the Table S-3 category "Effluents—Radiological Liquids."[26]

The zero-release value reflects the overall conservative approach taken by the Commission in identifying the § 102(2)(C) fuel cycle "environmental impacts." First, the NRC Staff assumed that one hundred percent of all volatile (*i.e.*, gases or vaporized liquids) radioactive materials would in fact be released to the environment. These are the products which would be most difficult to contain in a long-term repository.[27] Second, the Staff as-

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Policy Act, which sets up a schedule for identifying site locations and a funding mechanism for development of permanent waste repositories, shows that work on such facilities is proceeding apace.

[24] The only portion of the Table S-3 Rule at issue in this proceeding is that relating to the back end of the fuel cycle. *See NRDC II*, 685 F.2d at 463 (Bazelon, J.), *Pet. App.* 4a. The Rules dealing with the "front end" of the uranium fuel cycle were found by the Court of Appeals to have an adequate basis in the record. *NRDC I*, 547 F.2d at 647. The zero-release value represents a further subset of the back end portion of the Table S-3 Rule.

[25] 44 Fed. Reg. 45,369 (1979), *Pet. App.* 369a.

[26] The values reported in Table S-3 represent summations of the values for a given effect (*e.g.*, effect on land, water, and fossil fuel use, and gaseous and liquid effluents) of the steps in the uranium fuel cycle which will produce that effect. The zero-release value reflects a long-term repository's contribution to the terms listed in the category entitled "Effluents—Radiological Liquids," along with the predicted impacts of uranium mining, mill tailings, reprocessing, and transportation. The sums are presented in terms of "curies" of individual isotopes (*e.g.*, "uranium and daughters—2.1 curies, Ra-226—0.0034 curies, Th-230—0.0015 curies, Th-234—0.01 curies, fission and activation products—5.9 x 10^{6}").

[27] 44 Fed. Reg. 45,368 n.20 (1979), *Pet. App.* 365a n.20. The predicted impacts of pre-sealing releases are reflected in the category "Effluents—Radiological Gases." *See* NUREG-0116 at 2-29.

sumed that these materials would all be released before final sealing of the long-term repository (*i.e.*, before the radioactivity of these materials has been substantially depleted through natural radioactive decay).[28] These assumptions both tend to overstate the amount of radioactivity expected to be released to the environment, and thus clearly tend to posit an upper bound value for radioactive releases resulting from long-term waste disposal.[29] Thus, the entire domain of the zero-release value challenged by NRDC is limited to the likelihood that the remaining *nonvolatile* portion of nuclear waste—*i.e.*, solid wastes which can be released only if the repository structure is breached—will be effectively isolated from the environment.[30]

Having posited that much of the material available for release from a long-term repository would in fact be released prior to sealing and having reflected the results of this analysis in the Table S-3 Rule, the Commission then examined the likelihood that the remaining nonvolatile substances could be safely stored in a permanent repository. In this regard, the NRC Staff analyzed in-

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[28] 44 Fed. Reg. 45,368 (1979), *Pet. App.* 364a-365a. The Staff assumed that all fission-product gases in the spent fuel, including all tritium, krypton-85, carbon-14 and iodine-129, would be released prior to sealing of the repository. 44 Fed. Reg. 45,368 (1979), *Pet. App.* 364a-365a. This assumption is extremely conservative given the short (approximately 10 years) half-lives of tritium and krypton-85, *see* NUREG-0116 at A-1, and the fact that those two radionuclides contribute more than 95% of the health effects associated with a long-term repository. *See* NUREG-0216 at C-34.

[29] As such, use of the term "zero-release" out of context is misleading. The Commission is reflecting in its Table S-3 that a large portion of the radioactivity which would be difficult to contain in a long-term repository is being released to the environment. *See supra* note 28 and accompanying text. Since individual licensing boards must incorporate the *entire* Table S-3 in an individual plant EIS, these impacts of radioactive releases from a repository will be considered during individual licensing proceedings.

[30] 44 Fed. Reg. 45,368 (1979), *Pet. App.* 364a-365a.

tensively the long-term waste disposal method which the Commission concluded was most likely to be developed, and about which there was the most extensive information available—burial of wastes in bedded-salt geologic repositories.[31] The Staff then examined the possibility of repository failure from both commonplace occurrences, such as long-term corrosion and water leakage, and unusual occurrences, such as geological faulting, meteorite strikes, sabotage, and random drilling.[32] After reviewing all of this information,

> [t]he Commission conclude[d], having noted that uncertainties exist, that for the limited purpose of the fuel cycle rule it is reasonable to base impacts *on the assumption which the Commission believes the probabilities favor, i.e., that bedded-salt repository sites can be found which will provide effective isolation of radioactive waste from the biosphere.*

44 Fed. Reg. 45,369 (1979) (emphasis added), *Pet. App.* 369a. The Commission further concluded, based on the Staff findings of extremely low probabilities of repository failure and on the assumption that all volatile radioactive products would be released before final sealing of the repository, that "taking post-sealing releases as zero does not significantly reduce the overall conservatism of the table."[33] Based on these findings, the zero-release value was incorporated in Table S-3, along with the various other predictions made by the Commission as to the environmental impacts of the uranium fuel cycle.

III. The Latest Opinion of the Court of Appeals

This case is the latest stage in what began as a routine rulemaking initiated by the NRC's predecessor, the AEC,

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[31] 44 Fed. Reg. 45,368 (1979), *Pet. App.* 364a.

[32] *See* NUREG-0116 at 4-86 to 4-99.

[33] 44 Fed. Reg. 45,369 (1979), *Pet. App.* 370a.

to identify for the benefit of the public and the guidance of individual licensing boards certain secondary environmental impacts associated with licensing a nuclear plant. It has now assumed truly epic proportions.[34]

When this case was here previously in *Vermont Yankee*, 435 U.S. 519 (1978), this Court unanimously reversed the holding of the D.C. Circuit that NEPA required more elaborate rulemaking procedures than those provided in the Administrative Procedure Act (APA), 5 U.S.C. § 706 (1976).[35] This Court held that NEPA did not expand either the procedural duties imposed on an agency by the APA or a court's limited powers in reviewing agency decisions under the APA.[36] Accordingly, this Court remanded the Original Rule to the D.C. Circuit with explicit instructions to "review the rule as the Administrative Procedure Act provides."[37] After additional and

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[34] As discussed above, the background to this case includes three rulemaking proceedings, described in the prefatory statement to the Final Rule, 44 Fed. Reg. 45,364-67 (1979), *Pet. App.* 348a-360a, two decisions by the D.C. Circuit and a decision by this Court. In addition, several individual licenses that were based in part on these Rules were challenged by the NRDC and others. These proceedings have been held in abeyance pending the outcome of the litigation concerning the generic Table S-3 Rule. Lloyd Harbor Study Group, Inc. v. NRC, No. 73-2266 (D.C. Cir.); Aeschliman v. NRC, No. 73-1776 (D.C. Cir.); Saginaw Valley Study Group v. NRC, No. 73-1867 (D.C. Cir.); NRDC v. NRC, No. 74-1385 (D.C. Cir.); Coalition for the Environment v. NRC, No. 77-1905 (D.C. Cir.); and New England Coalition of Nuclear Pollution v. NRC, No. 76-1525 (1st Cir.).

[35] *Vermont Yankee*, 435 U.S. at 548; *see NRDC I*, 547 F.2d at 653-54.

[36] *Vermont Yankee*, 435 U.S. at 548; *see also* Kleppe v. Sierra Club, 427 U.S. 390, 405-406 (1976). This Court emphasized that the Commission had complied with the informal notice and comment requirements of § 4 of the APA, and that NEPA did not require any more. *Vermont Yankee*, 435 U.S. at 548.

[37] *Vermont Yankee*, 435 U.S. at 549.

more detailed rulemakings,[38] the latest version of the Table S-3 Rule concerning the back end of the fuel cycle, and both its predecessors, have again been vacated by the lower court, this time based on a new, substantive interpretation of NEPA.[39]

The latest decisions of the court below are contained in three lengthy opinions. The first opinion, by Senior Judge Bazelon, invalidated the portions of the Table S-3 Rule relating to the environmental effects of the back end of the uranium fuel cycle, but sustained the Commission's finding on a second issue, which is not before this Court—that construction and operation of waste management facilities is economically feasible. The second opinion, by Judge Edwards of the Sixth Circuit, concurred with Judge Bazelon in invalidating the back end portions of the Table S-3 Rule but would, in addition, have found nuclear waste facilities to be economically infeasible.[40]

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[38] These additional rulemakings led to promulgation of the Interim and Final Rules which, like the Original Rule, were immediately challenged by NRDC. *See supra* note 16 and accompanying text.

[39] *See NRDC II*, 685 F.2d at 484-85 (Bazelon, J.), *Pet. App.* 47a-49a.

[40] *NRDC II*, 685 F.2d at 516 (Edwards, J., concurring and dissenting), *Pet. App.* 115a-116a. In those portions of his lengthy opinion which concur with Judge Bazelon, Judge Edwards dramatically characterizes the instant case as involving "review [of] the continuing effort of the NRC to pit human intelligence against the most primordial force of nature" and speculates that it "may prove to be one of the most important cases to be decided by the United States courts in this century." *Id.* at 494-95, *Pet. App.* 70a. His opinion is premised on the use of plutonium as a standard commercial power reactor fuel—even though that nuclear fuel cycle configuration is not presently permitted by the NRC and is specifically excluded from the scope of the Table S-3 Rule, *see* 44 Fed. Reg. 45,362 (1979), *Pet. App.* 342a; NUREG-0116 at iii—and consists primarily of a 47-page polemic about the dangers of plutonium. His opinion ignores the Commission's limitation of the scope of the Table S-3 Rule, and concludes that omission of the plutonium fuel cycle from the scope of the Rule necessarily invalidates it. *NRDC II*, 685 F.2d at 516 (Edwards, J., concurring and dissenting), *Pet. App.* 114a-115a.

The third opinion, by Judge Wilkey, dissented from Judge Bazelon's invalidation of the back end of the Table S-3 Rule, but concurred with his finding of economic feasibility.

As discussed above, the zero-release value addressed in the majority opinion was a product of the NRC's exercising its expert judgment to predict the fate of high level nonvolatile wastes. The Commission chose not to base its environmental impact conclusion on the remote chance, or "risk," that permanent disposal facilities would not be developed. Rather, it chose the most likely outcome—that permanent repositories would be developed and these facilities would effectively isolate nonvolatile wastes from the environment.[41] In accordance with § 102(2)(C) of NEPA, this rulemaking conclusion was disclosed in Table S-3 and was required to be considered in each individual licensing proceeding.[42]

The majority below tests the validity of Table S-3 against a new interpretation of NEPA. In the opinion below, the court construed the term "environmental costs" as being synonymous with the term "significant risk."[43] While these terms do not appear in NEPA,[44] the interpretation given them by the court below led it to conclude that the NRC violated NEPA by basing its estimate of the future environmental impact of disposal of nonvolatile nuclear waste on a prediction, fully supported by an extensive rulemaking record, that safe permanent disposal facilities will be developed. Because development of repositories is "uncertain" (*i.e.*, as with anything that

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[41] *See supra* text at 11-14.

[42] *See supra* text at 10.

[43] *NRDC II*, 685 F.2d at 478-79, 483 (Bazelon, J.), *Pet. App.* 36a-38a, 45a-46a.

[44] In Calvert Cliffs' Coordinating Comm., Inc. v. AEC, 449 F.2d 1109, 1115-16 (D.C. Cir. 1971), the D.C. Circuit coined the phrase "environmental costs" in discussing the NEPA requirement that environmental impacts be considered in the decisionmaking process.

has not yet occurred, its probability of occurrence is less than 100 percent), the court below directed that each EIS prepared by the NRC must disclose effects that are based on the prediction that such facilities will not be developed.[45]

Under the lower court's decision, an agency is not authorized under NEPA to look at the universe of potential environmental effects and exercise its expert judgment to determine the impact that may reasonably result from implementation of the proposed action. Instead, an agency must disclose, in each EIS, the entire spectrum of environmental "risks" ranging from potentially severe effects that would be associated with events that the agency has determined are unlikely to occur, to very small potential effects associated with likely events.[46]

To fulfill this new disclosure obligation, the lower court further held that an agency must demonstrate that the future uncertainties associated with each of the risks in the spectrum have been subjected to vigorous probabilistic analyses. The result of these analyses (*i.e.*, "the product of the environmental damage that could occur and the probability of its occurrence") must be disclosed in each EIS.[47] Alternatively, if an agency does not wish to evaluate the probabilities associated with the entire spectrum of risks, it must identify and disclose the extreme "worst case" risk accompanied by the probability of that remote scenario occurring.[48]

Applying these NEPA standards to the zero-release value in Table S-3, the lower court vacated the Table S-3 Rule and remanded it to the NRC. According to the court, the Rule was "not in accordance with law" and

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[45] *See NRDC II*, 685 F.2d at 479 and n.101 (Bazelon, J.), *Pet. App.* 36a-37a and n.101.

[46] *Id.* at 478-79 nn.100, 101, 484-85, *Pet. App.* 36a-37a nn.100, 101, 47a-49a.

[47] *Id.* at 481, 482-84, *Pet. App.* 38a, 43a-46a; *see infra* note 77.

[48] *Id.* at 479 n.101, *Pet. App.* 37a n.101.

"arbitrary and capricious" since the NRC had neither disclosed a full spectrum of environmental risks in Table S-3 nor based Table S-3 on remote, worst risk effects (*i.e.*, the assumption that waste disposal facilities would not be developed). The majority's new interpretation of NEPA was not raised, or even hinted at, the last time this Rule was before the lower court.

The majority also objected to the NRC's method of disclosing the environmental impacts of the back end of the fuel cycle in Table S-3. The Table S-3 Rule discloses the physical impacts of the back end of the fuel cycle in terms of quantities of land, water, and energy used, and of heat, chemical, and radioactivity released. The implications of these values in terms of the health, socioeconomic, and cumulative consequences are not explicitly addressed in the Table. Interpreting the Original and Interim Rules to preclude consideration of Table S-3 in individual licensing proceedings beyond reproduction of Table S-3 itself, the lower court found that the Rule violated NEPA.[49] The majority reached this conclusion despite earlier statements by the Commission that health, socioeconomic, and cumulative consequences could be considered in individual licensing proceedings, and in the absence of any showing that consideration of such consequences had ever been excluded from an individual licensing proceeding.

Judge Wilkey found no merit in the majority's holdings. First, Judge Wilkey rejected the majority's interpretation of NEPA, explaining that nothing in NEPA prevents an agency from making the kind of prediction that underlies Table S-3.[50] He then followed this Court's direction in *Vermont Yankee* to review the record to determine, applying the "appropriate standard of review," whether there was sufficient justification for the Table

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[49] *NRDC II*, 685 F.2d at 490 (Bazelon, J.), *Pet. App.* 51a-52a.

[50] *NRDC II*, 685 F.2d at 533-34, 537, 545 (Wilkey, J., dissenting), *Pet. App.* 154a-158a, 164a, 180a-181a.

S-3 Rule.[51] Doing this, he found substantial support in the rulemaking record for the necessary factual underpinnings (*e.g.*, the types of repositories and the potential methods of release) and found that the Commission's policy judgment that a permanent repository would be developed reflected "reasoned decisionmaking" and therefore was not "arbitrary and capricious." [52]

SUMMARY OF ARGUMENT

Section 102(2)(C) of NEPA calls for agencies to identify and disclose the "environmental impact of [a] . . . proposed action." To fulfill this NEPA obligation, an agency is required to look to a future which is inherently uncertain and predict the "environmental impact" that will result from implementation of its proposal. In requiring the NRC to disclose in each EIS the entire spectrum of potential environmental outcomes (rather than the "environmental impact") the court below mandates a procedure that is inconsistent with the language of NEPA and its objective that the "environmental impact" be realistically disclosed.

Having exercised its expert judgment, an agency's determination of what the "environmental impact" will be is subject to review under the APA. If the rulemaking record shows that the agency's exercise of judgment in predicting the environmental impact of the proposed action reflects "reasoned decisionmaking," the final determination must be upheld. Courts may not substitute their judgment for that of an agency. In this case, the lower court has substituted its judgment for that of the NRC by holding that the NRC may not predict, based on an extensive administrative record, that the environmental impact of long-term disposal of nonvolatile nuclear wastes will be "zero."

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[51] *Id.* at 521-24, 538-40, *Pet. App.* 127a-134a, 164a-170a.

[52] *Id.* at 537-40, 545, *Pet. App.* 163a-170a, 180a-181a.

From a procedural standpoint, the APA's "reasoned decisionmaking" standard requires that an agency, *inter alia*, show that it has identified the choices that are reasonably available and has articulated the reasons for making the selection that it has made. In the context of NEPA, this requires that an agency identify potential environmental risks and explain why the "risk" value chosen reasonably represents the predicted environmental impact. Neither NEPA nor the APA requires an agency to conduct a detailed, probabilistic analysis of every environmental risk and to disclose the results of these analyses in an EIS in each proceeding. Thus, if the NRC has satisfied the APA "reasoned decisionmaking" requirement in concluding what the environmental impact of its proposal will be, it will satisfy its NEPA obligations by disclosing and considering that environmental impact in each licensing proceeding. The NRC has clearly met these requirements in this case. The lower court's holding that the NRC must perform and disclose in each proceeding detailed probabilistic analyses of all environmental risks has no foundation in either NEPA or the APA.

Finally, NEPA leaves to the agency's discretion the form of disclosure of the environmental impacts of a proposed action. For example, with respect to the NRC's Table S-3 Rule, nothing in NEPA requires disclosure of health effects in terms of "deaths and genetic defects" instead of the more commonly used unit of "curies." Since "curies" can be readily interpreted in terms of health and other environmental effects and since the Commission has always interpreted the Rule in question to permit discussion of "curies" in terms of health and other environmental effects, the lower court may not invalidate the Commission's Rule based on the court's inconsistent view that the health and other environmental effects of a proposed action should be explicitly discussed in a generic rule.

ARGUMENT

What began as a straightforward effort by a Federal agency to fulfill its obligations under NEPA to identify certain secondary environmental impacts of a proposed action has evolved into a ten year administrative ordeal. For the second time in four years, this Court is being called upon to determine whether the NRC violated either NEPA or the APA in adopting its Table S-3 Rule. Like the last time this question was posed, its resolution must be found in the language of NEPA and the decisional requirements of the APA. Both were ignored by the court below in an opinion which (1) eviscerates the NEPA requirement that an agency exercise its judgment to predict what the future environmental consequences of implementing a proposal will be, (2) imposes a complex analytical methodology on the NRC which finds no support in law, and (3) ignores the NRC's broad discretion to interpret its own rules. For the reasons discussed below, this Court should reverse the decision of the D.C. Circuit and enter an order affirming the Original, Interim, and Final versions of Table S-3.

I. The D.C. Circuit Improperly Applied NEPA in Vacating the Table S-3 Rule

In the Table S-3 Rule, the NRC concluded that a zero-release value should be used to represent the environmental impact of disposal of nonvolatile high level wastes.[53] The question which must be resolved in this case is whether the NRC acted lawfully in reaching this conclusion. The Administrative Procedure Act establishes the standards for resolving this question.[54]

Under the APA, if the NRC (1) acted "in accordance with law" and (2) did not "abuse its discretion" or act

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[53] 44 Fed. Reg. 45,358 (1979), *Pet. App.* 365a; *see supra* text at 13-14.

[54] *See Vermont Yankee*, 435 U.S. at 549; *NRDC II*, 685 F.2d at 475 (Bazelon, J.), *Pet. App.* 28a-29a.

in an "arbitrary or capricious" manner,[55] its action must be upheld. To determine whether the NRC satisfied the standard of consistency with law, a reviewing court must look to the language of NEPA. To determine whether the NRC satisfied the second standard, a reviewing court must make a "searching and careful" examination of the record to ensure that the Commission has adequately considered all relevant factors and has demonstrated rational connections between the facts found and the choices made. In other words, the reviewing court must find that the Commission's rulemaking conclusions reflect "reasoned decisionmaking." [56]

In setting aside the zero-release value in Table S-3, the majority below looked to neither the language of NEPA nor the requirements of "reasoned decisionmaking." [57] Had the D.C. Circuit considered the "plain language" of NEPA, it would have found the Table S-3 Rule consistent with that Act and it would not have created procedural obligations that find no support in NEPA or the APA. Had the court below tested the Rule by the "reasoned decisionmaking" requirements of the APA, it would have concluded, as Judge Wilkey did in his dissent, that the Commission did not act arbitrarily or abuse its discretion.[58]

For the reasons discussed below, NEPA not only authorizes, but requires, the NRC to predict what the envi-

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[55] 5 U.S.C. § 706(2)(A), *Pet. App.* 393a.

[56] Citizens to Preserve Overton Park v. Volpe, 401 U.S. 402, 416 (1971); National Lime Ass'n v. EPA, 627 F.2d 416, 453 (D.C. Cir. 1980); Ethyl Corp. v. EPA, 541 F.2d 1, 34 & n.74 (D.C. Cir.), *cert. denied sub nom.* E. I. DuPont de Nemours & Co. v. EPA, 426 U.S. 941 (1976).

[57] As Judge Wilkey recognizes in his dissenting opinion, "Judge Bazelon's majority opinion has braided from NEPA, the APA, and his own perceptions of public good a novel standard of substantive and procedural scrutiny . . . ." *NRDC II*, 586 F.2d at 517 (Wilkey, J., dissenting), *Pet. App.* 119a.

[58] *NRDC II*, 685 F.2d at 538, 545 (Wilkey, J., dissenting), *Pet. App.* 165a-166a, 180a-181a.

ronmental impact of its proposal will be and to disclose that prediction in each EIS. In requiring disclosure of the entire spectrum of potential outcomes or "risks" (or, in the alternative, "worst case" remote risks) in each EIS, the court below has compelled action that is contrary to both the language and purposes of NEPA, and has imposed procedures which exceed the requirements of NEPA and the APA. Accordingly, the lower court's decision violates the mandate of this Court in *Vermont Yankee* and should be reversed.

A. The Table S-3 Rule Is Consistent with the NEPA Requirement That an Agency Identify the "Environmental Impact" of a Proposal

The primary issue in this case is whether, as a matter of law, NEPA precludes the NRC from adopting the zero-release value in Table S-3 and using that value in the environmental impact statements that the NRC must prepare under § 102(2)(C) of NEPA for each nuclear power plant. To resolve this issue, a court must center its attention on the statutory language of § 102(2)(C) for, as this Court noted in *Vermont Yankee*, "the only procedural requirements imposed by NEPA are those stated in the plain language of the Act."[59] Unfortunately, since its enactment in 1970, NEPA has too often been viewed as a living document which needs to be "expounded" by the courts rather than as a statute which confers specific powers and specific responsibilities and must be interpreted in light of its plain meaning.[60] As a result, NEPA has gradually taken on life of its own, complete with a new set of terms (*e.g.*, "environmental costs") which do not appear in language of § 102(2)(C).

In *NRDC II*, the majority below strays further from the statutory language of § 102(2)(C). It first focuses on the judicially created concept of "environmental

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[59] *Vermont Yankee*, 435 U.S. at 519, *citing* Kleppe v. Sierra Club, 427 U.S. 390, 405-06 (1976).

[60] *Cf.* M'Culloch v. Maryland, 17 U.S. (4 Wheat.) 316, 406-07 (1819).

cost." [61] It then equates that term with terms such as "significant environmental risks" and "uncertainties." *NRDC II*, 685 F.2d at 479-480, 483 (Bazelon, J.), *Pet. App.* 36a-41a, 46a-47a. Through this step-by-step departure from the language of NEPA, the majority below is ultimately able to conclude that the NRC has violated NEPA by predicting a negligible environmental impact in the face of the remote possibility that long-term repositories for high level wastes might not be developed.[62] Instead of having the NRC exercise its judgment to predict the future environmental consequence of its proposed actions, the majority below would require the NRC to disclose in each EIS either the entire spectrum of potential environmental "risks" associated with long term disposal or the "worst case" remote risk of such disposal.[63] The language of NEPA contradicts these holdings and, if allowed to stand, the decision of the court below would subvert the basic purpose of NEPA.

1. *The D.C. Circuit Ignored the "Plain Language" of NEPA*

NEPA does not require the disclosure of a laundry list of environmental "risks" of a proposal. Rather, § 102(2)(C) calls for agencies to decide which of those "risks" reasonably represent the "environmental impact of [a] . . . proposed action" and its "adverse environmental effects which cannot be avoided." [64] To fulfill this statutory command to predict the future environmental consequence of its action, an agency must exercise judgment and select, from the spectrum of potential "risks,"

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[61] *See supra* note 44.

[62] *NRDC II*, 685 F.2d at 481, 483-85 (Bazelon, J.), *Pet. App.* 41a-42a, 46a-49a; *see supra* text at 17-19.

[63] *NRDC II*, 685 F.2d at 478-79 nn.100 & 101, 483-85 (Bazelon, J.), *Pet. App.* 36a-37a nn.100 & 101, 46a-49a; *see supra* text at 18.

[64] National Environmental Policy Act of 1969, § 102(2)(C), 42 U.S.C. § 4332(2)(C), *Pet. App.* 432a; *see supra* text at 5-6.

the one which the agency believes represents *the* environmental impact of the proposal.[65] Thus, under NEPA, an agency is not merely authorized, but required, to face the uncertainty associated with making any prediction about the future and to determine what the environmental impact of its proposal will or will not be.[66]

In this case, the NRC looked to the future and exercised its expert judgment to predict that the "environmental impact" of long-term disposal would be negligible. In reaching this conclusion, the Commission reviewed extensive information on feasible methods of high level waste disposal and predicted that disposal facilities which

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[65] *See* Alaska v. Andrus, 580 F.2d 465, 473 n.36 (D.C. Cir. 1978); *supra* text at 5-6. This is especially true in the case of nuclear waste disposal issues, where no long-term repositories currently exist and the technology is complex and constantly developing. Even though repositories do not currently exist, "Congress has made a choice to at least try nuclear energy, establishing a reasonable review process in which courts are to play only a limited role." *Vermont Yankee*, 435 U.S. at 557-58.

[66] In calling upon an agency to make decisions that are based upon predictions as to what will occur in the future, NEPA is not unique among Federal statutes. Under virtually every major regulatory statute expert agencies are charged with broad discretion "to make predictions en route to factual, technical, and policy judgments." *NRDC II*, 685 F.2d at 518 (Wilkey, J., dissenting), *Pet. App.* 121a. In making such predictions, an agency often acts on the "frontiers of scientific knowledge," (*see, e.g.*, EDF v. EPA, 598 F.2d 62, 83-84 (D.C. Cir. 1978) (regulation of PCBs under the Federal Water Pollution Control Act); *Industrial Union Dep't*, 499 F.2d at 474 (promulgation of standards for asbestos dust levels under the Occupational Health and Safety Act)) and "necessarily enjoys broad discretion to attempt to formulate a solution to the very best of its ability on the basis of available information." *Industrial Union Dep't*, 499 F.2d at 474 n.18. In sum, to carry out their responsibilities under statutes such as NEPA, agencies must assess "such facts as are available and . . . [make] rational predictions about how currently unanswerable questions will someday be answered." *NRDC II*, 685 F.2d at 534 (Wilkey, J., dissenting), *Pet. App.* 167a; *cf. National Lime Ass'n*, 627 F.2d at 452-53.

would not release radiation to the environment could, and would, be developed.[67] The Commission specifically chose not to base its "environmental impact" conclusion on the remote chance, or "risk," that permanent disposal facilities would not be developed.[68]

In holding that the NRC must disclose in each EIS a host of environmental "risks," or in the alternative the worst case remote "risk," the court below ignored the language of NEPA which calls for the NRC to decide what the "environmental impact" of its action will be. In directing the Commission to disclose in each EIS the environmental consequences of not developing permanent

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[67] *See supra* text at 11-14.

[68] *See* 44 Fed. Reg. 45,368 (1979), *Pet. App.* 366a. Courts have traditionally permitted agencies to exercise such discretion. Courts have not required agencies to discuss events which do not have significant effects, nor have they required the consideration of improbable events. *See, e.g.*, Warm Springs Dam Task Force v. Gribble, 621 F.2d 1017, 1026-27 (9th Cir. 1980) (the court held that an EIS prepared for a dam construction project need not include an evaluation of the environmental consequences of a total failure of the dam); Trout Unlimited v. Morton, 509 F.2d 1276, 1283 (9th Cir. 1974); EDF v. Corps of Engineers of U.S. Army, 348 F. Supp. 916, 933 (N.D. Miss. 1972), *aff'd*, 492 F.2d 1123 (5th Cir. 1974). In determining the probability and impact of a potential event, the courts have deferred to the expert agency. *See* Columbia Land Protection Ass'n v. Schlesinger, 643 F.2d 585, 592-93 (9th Cir. 1981).

This Court's interpretation of the subsection of § 102(2)(C) of NEPA dealing with the consideration of alternatives to the proposed action provides a useful analogy. In *Vermont Yankee*, this Court concluded that the concept of alternatives must be bounded by "some notion of feasibility." 435 U.S. at 551. The court went on to state:

> Time and resources are simply too limited to hold that an impact statement fails because the agency failed to ferret out every possible alternative, regardless of how uncommon or unknown that alternative may have been at the time the project was approved.

Id.; *see also* NRDC v. Morton, 458 F.2d 827, 837-38 (D.C. Cir. 1972).

storage facilities, the court below substituted its judgment regarding "environmental impact" for that of the Commission. In other words, the NRC said that, in the context of the Table S-3 Rule, "zero" will be the "environmental impact" of disposal of the nonvolatile portion of nuclear waste; the court below said "more than zero" will be.[69] NEPA gives the NRC, not the D.C. Circuit, the authority and the responsibility to decide what is, and what is not, the proposal's "environmental impact" for purposes of § 102(2)(C) of NEPA.

2. *The D.C. Circuit Ignored the Purposes of NEPA*

The lower court's opinion would produce results that run counter to the basic purposes of NEPA. NEPA was enacted to require disclosure of a proposal's "environ-

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[69] The dispute in the court below centers on the Commission's use of a zero-release value for radioactive emissions from a sealed repository. The majority interprets this figure to represent a Commission finding that releases would never occur at a long-term repository. *NRDC II*, 685 F.2d at 480-81 (Bazelon, J.), *Pet. App.* 38a-42a. On the other hand, Judge Wilkey correctly notes:

> The relevant question with regard to the zero-release assumption is not whether the zero figure itself is precisely accurate but whether the Commission's decision to adopt it was reasoned. The first step must be to recognize that the figure was never meant to be a "factual finding" as the majority proposes; it is intended only as a generic determination of the *appropriate weight* to be accorded in licensing proceedings to risks of radioactive emission from long-term waste storage.

NRDC II, 685 F.2d at 537-38 (Wilkey, J., dissenting), *Pet. App.* 164a-165a (emphasis in original); *see also supra* note 23.

Both sides agree that the Commission considered the uncertainties surrounding the use of a zero-release value from long-term repositories. *See NRDC II*, 685 F.2d at 481 and n.118 (Bazelon, J.), *Pet. App.* 41a and n.118; 685 F.2d at 538-40 (Wilkey, J., dissenting), *Pet. App.* 165a-170a. It was the majority's improper substitution of its views on the integrity of a long-term repository for those of the Commission which led the court below to find that the rules were arbitrary and capricious. *See NRDC II*, 685 F.2d at 537, 539-40 (Wilkey, J., dissenting), *Pet. App.* 164a, 168a-170a.

mental impact" so that decisionmakers could intelligently judge the environmental consequences of implementing their proposed actions and the public could be assured that environmental considerations have been taken into account.[70] If the Commission is required to disclose in each EIS remote "risks" which, in the Commission's judgment, *do not* reflect the "environmental impact" that will occur if the proposal is adopted, the NEPA goal of realistic disclosure will be frustrated.[71] Indeed, if the Commission accepts the lower court's invitation to disclose only "worst case" remote risks, an EIS will become a document that not only fails to disclose but also greatly exaggerates the "environmental impact" of a proposal.[72]

3. *Conclusion*

The type of prediction underlying Table S-3 is required by the plain language of NEPA. The requirements imposed by the court below cannot be found in the language of NEPA and would, if imposed, frustrate NEPA's disclosure goals. Accordingly, the D.C. Circuit erred in holding that the zero-release value in Table S-3 was contrary to law, and its decision should be reversed.

B. Neither the "Reasoned Decisionmaking" Standard of the APA Nor the EIS Requirements in NEPA Mandate Detailed Probabilistic Analyses of Potential Environmental Effects

Under the APA, the NRC was required to engage in "reasoned decisionmaking" in reaching its conclusion that

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[70] Weinberger v. Catholic Action of Hawaii/Peace Education Project, 454 U.S. 139, 143 (1981).

[71] *Cf. NRDC II*, 685 F.2d at 539, 541-42, 544-45 (Wilkey, J., dissenting), *Pet. App.* 166a-167a, 173a-175a, 178a-180a.

[72] Use of worst case values will tend to force agencies to give environmental risks greater weight than other factors, since the Commission will be using inflated environmental effects in the decisionmaking process. This is contrary to NEPA and to this Court's decision in Strycker's Bay Neighborhood Council v. Karlen, 444 U.S. 223, 227 (1980), that environmental considerations not be elevated above otherwise applicable statutory criteria.

the "environmental impact" of high level waste disposal would be negligible.[73] From a procedural standpoint, "reasoned decisionmaking" requires that the Commission, *inter alia*, show that it has identified the choices that are reasonably available and has articulated the reasons for making the selection that it did.[74] In the context of a NEPA decision regarding what the "environmental impact" of a proposed action will be, this requires that the NRC identify potential environmental risks and explain why the "risk" value chosen reasonably represents the predicted "environmental impact." As described above and in Judge Wilkey's dissent, the Commission, in the Table S-3 rulemaking, fully satisfied the APA requirements of disclosure and explanation associated with "reasoned decisionmaking." [75]

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[73] *See National Lime Ass'n*, 627 F.2d at 453.

[74] Lead Industries Ass'n v. EPA, 647 F.2d 1130, 1147 (D.C. Cir. 1980); *Industrial Union Dep't*, 499 F.2d at 474-75 n.18; *see NRDC II*, 685 F.2d at 534 (Wilkey, J., dissenting), *Pet. App.* 156a-157a. In Amoco Oil Co. v. EPA, 501 F.2d 722 (D.C. Cir. 1974), the court stated:

> Where . . . the regulations turn on choices of policy, on an assessment of risks, or on predictions dealing with matters on the frontiers of scientific knowledge, we will demand adequate reasons and explanations, but not "findings" of the sort familiar from the world of adjudication.

Id. at 741.

[75] *NRDC II*, 685 F.2d at 537-40 (Wilkey, J., dissenting), *Pet. App.* 163a-170a; *see supra* text at 7-14. As described above, the Table S-3 Rule is the product of extensive rulemaking proceedings. *See supra* text at 7-10. The Commission and its Hearing Board have considered a variety of possible environmental effects resulting from the operation of, among others, interim spent fuel storage facilities, permanent waste repositories, and reprocessing plants. These studies have revealed a range of possible effects. In setting the values in Table S-3, the Commission selected conservative values from within these ranges of possible effects. *See supra* text at 12-14;

The majority below, however, found that NEPA requires more procedurally than is needed to satisfy the disclosure and articulation requirements of the APA. Specifically, the lower court found that the NRC, in each EIS prepared for an individual plant, must demonstrate that it has "trace[d] each reasonably foreseeable contingency and determine[d], first, the likelihood of its occurring, and second, the environmental damage it would entail." [76] Thus, for each possible environmental "risk," the NRC must determine "the product of the environmental damage that could occur and the probability of its occurrence." [77]

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44 Fed. Reg. 45,364 (1979), *Pet. App.* 349a; Hearing Board Conclusions at 17, 62, 65-67, *Pet. App.* 288a, 317a, 320a-321a.

With respect to long-term waste repositories, the NRC Staff examined potential radioactive releases from salt repositories that could result from such unlikely events as water leakage, geological faulting, a strike by a nuclear bomb and a direct hit by a large meteorite. *See supra* text at 14. None of these extraordinary occurrences was shown to have a significant effect on the Commission's zero-release value or the overall conservatism of Table S-3. 44 Fed. Reg. 45,368-69 (1979), *Pet. App.* 369a-370a; *see also* Baltimore Gas and Electric Co., *et al.* Letter of January 23, 1979, *J.A.* 281-90. In sum, the Commission has more than complied with the "reasoned decisionmaking" requirements of the APA.

[76] *NRDC II*, 685 F.2d at 479 n.101 (Bazelon, J.), *Pet. App.* 37a n.101.

[77] *Id.* at 478-79 n.100, *Pet. App.* 36a n.100. In his concurrence in a still more recent case, Judge Bazelon elaborated on the type of probabilistic analyses which he reads NEPA as requiring. Potomac Alliance v. NRC, 682 F.2d 1030 (D.C. Cir. 1982) (Bazelon, J., concurring). According to Judge Bazelon, NEPA demands that an agency first determine "whether the sum of all reasonably foreseeable effects, discounted by the probability of their occurrence, represents a 'significant' effect on the environment." *Id.* at 1037 (Bazelon, J., concurring) (emphasis added). If this summing of effects shows that a "significant" effect might occur, then "the agency must issue an EIS analyzing the probabilistic facets" of all possible effects.

Under Judge Bazelon's approach, therefore, an agency cannot satisfy NEPA by considering uncertainties associated with the various environmental risks and predicting what the environmental

The court characterizes this elaborate procedural obligation to assess probabilities as being "*somewhat flexible.*" [78] In making this observation, the court gives no specific guidance as to the nature or scope of this "flexibility." As a result, the Commission cannot know whether the probabilistic analyses it conducts will pass muster until the D.C. Circuit reviews the Commission's decision and either affirms or reverses it.[79] Thus, on remand, the Commission must once again guess just how far it must go to satisfy the D.C. Circuit the next time around.[80]

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impact of the proposal will be. Rather, each EIS must explicitly address all possible environmental effects, no matter how improbable. Indeed, Judge Bazelon's logic would apparently compel an agency to have conducted such an analysis at the threshold in its determination whether its proposal even warrants issuance of a full-blown EIS rather than a briefer Environmental Assessment.

This is reminiscent of Judge Bazelon's decision in Aeschliman v. NRC, 547 F.2d 622-28 (D.C. Cir. 1976), *rev'd sub nom.* Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519 (1978), where he imposed on the NRC a burden to respond to energy conservation alternatives raised by petitioners, no matter whether these effects crossed a threshold of "reasonable availability." This Court emphatically rejected this instrusion into the agency decisionmaking process in that case, emphasizing the limited "role of the court in reviewing the sufficiency of an agency's consideration of environmental factors." *Vermont Yankee*, 435 U.S. at 555.

[78] *NRDC II*, 685 F.2d at 479 n.101 (Bazelon, J.) (emphasis added), *Pet. App.* 37a n.101.

[79] With respect to uncertainties underlying other values in Table S-3, the lower court comments that:

> It is impossible for this Court to determine whether there are other numerical values in Table S-3 that mask uncertainties without using such conservative heuristic devices as a worst-case scenario. We expect, however, that the Commission's consideration of uncertainties underlying the zero-release assumption will encompass any significant uncertainties underlying other values in the Table.

NRDC II, 685 F.2d at 486 (Bazelon, J.) (footnote omitted), *Pet. App.* 52a.

[80] Similarly, the last time the Commission was before the D.C. Circuit, it was confronted with the delphic direction that it afford

The procedural obligation to trace and report every conceivable environmental contingency and determine its probability of occurrence and severity of potential effect cannot be found in the "reasoned decisionmaking" requirements of the APA.[81] Similarly, the procedure has no basis whatsoever in the requirements of NEPA. All NEPA requires is disclosure and consideration of the "environmental impact" of a proposed action.[82] If the Commission satisfies the APA "reasoned decisionmaking" requirements in concluding that the Table S-3 values represent the fuel cycle "environmental impact" of an individual plant, it will satisfy its NEPA obligations by disclosing and considering the Table S-3 values in each licensing proceeding.

In sum, this Court is once again forced to "search in vain" for something in NEPA which mandates the procedural result reached by the court below.[83] Once again, the court below has attempted to use NEPA "as the basis for a substantial revision of the carefully constructed procedural specifications of the APA."[84] Neither NEPA nor the APA requires agencies to demonstrate that they have conducted detailed probabilistic analyses. This Court

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"additional rulemaking procedures" on remand. *See Vermont Yankee*, 435 U.S. at 546-47.

[81] As Judge Wilkey explains in his dissenting opinion,

> where agency rules, such as the one here, are based on 'choices of policy, . . . assessment of risk, or . . . predictions dealing with matters on the frontiers of knowledge' the agency has the authority to promulgate such rules, so long as they are based on such facts as are available and on rational predictions about how currently unanswerable questions will someday be answered.

NRDC II, 685 F.2d at 534 (Wilkey, J., dissenting) (citations omitted), *Pet. App.* 156a-157a.

[82] *See supra* text at 23-25.

[83] *Vermont Yankee*, 435 U.S. at 548.

[84] *Id.*

should reject this latest attempt by the D.C. Circuit to dictate procedures that are not required by law.

II. In Invalidating the Original and Interim Rules for Their Failure to Describe Environmental Impacts in Health, Socioeconomic, and Cumulative Terms, the D.C. Circuit Improperly Intruded on the NRC's Statutory Discretion

The lower court's alternative grounds for invalidating the Original and Interim Rules arise from the fact that Table S-3 depicts "the environmental effects of the fuel cycle in terms of the quantity of land, water, and energy used, and of heat, chemicals and radioactivity released." [85] Since the Original and Interim Rules did not expressly state that individual licensing boards could consider these physical impacts in public health, socioeconomic, and cumulative terms, the lower court interpreted the Original and Interim Rules to preclude such consideration.[86] Based on this interpretation, the lower court held that the Original and Interim Rules violated § 102(2)(C) of NEPA.[87]

As discussed above, § 102(2)(C) of NEPA requires only disclosure of the "environmental impact" of a proposed action, and consideration of that impact in the decisionmaking process. It leaves the form of disclosure to the agency's discretion.[88] Based on extensive analyses, in-

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[85] *NRDC II*, 685 F.2d at 486 (Bazelon, J.), *Pet. App.* 52a.

[86] *Id.* at 488-90, *Pet. App.* 56a-60a.

[87] *See NRDC II*, 685 F.2d at 490 (Bazelon, J.), *Pet. App.* 60a. The majority evidently would have affirmed the Original and Interim Rules had the court been able to conclude that health, socioeconomic, and cumulative implications of the Table S-3 values could be discussed in individual proceedings. *Id.*

[88] National Environmental Policy Act of 1969, § 102(2)(C), 42 U.S.C. § 4332(2)(C), *Pet. App.* 432a; *see* NRDC v. Morton, 458 F.2d at 836, 838; *see also Vermont Yankee*, 435 U.S. at 555.

cluding detailed health assessments, the Commission chose to express radiological impacts in terms of "curies" alone.[89] Rulemaking participants had no difficulty understanding the Table S-3 values in terms of their health implications. For example, NRDC filed numerous comments dealing with health effects as derived from curies.[90] It is also noteworthy that in the previous appeal of the Original Rule, the D.C. Circuit did not disturb the Rule as it applied to the *front end* of the fuel cycle even

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[89] It is up to the Commission, of course, to determine how it will disclose its conclusions on environmental impacts. While the lower court argues that "it is not releases of curies that Congress wanted disclosed . . . [but] the number of cancer deaths or genetic defects to be expected," it cites nothing in the legislative history or language of NEPA which even mentions "curies," much less precludes an agency from using them to represent an environmental impact. *See NRDC II*, 685 F.2d at 486-87 (Bazelon, J.), *Pet. App.* 52a-53a. The majority's decision in this regard is reminiscent of an earlier holding by Judge Bazelon in Aeschliman v. NRC, 547 F.2d 622 (D.C. Cir. 1976). In that case, the court of appeals held that an Advisory Committee on Reactor Safeguards (ACRS) report should have been returned to the ACRS. The court felt that since the essential information was not contained in a single document and written for a "layman," the report was not acceptable under the APA. *Aeschliman*, 547 F.2d at 631. In reversing that holding in *Vermont Yankee*, this Court found the lower court had improperly dictated to the Commission how to disclose this material, stating:

> The proposed plant underwent an incredibly extensive review. The reports filed and reviewed literally fill books. The proceedings took years, and the actual hearings themselves over two weeks. To then nullify that effort seven years later because one report refers to other problems, which problems admittedly have been discussed at length in other reports available to the public, borders on the Kafkaesque.

435 U.S. at 557. The same can be said for the lower court's effort in this case to dictate the manner in which the Commission must disclose health, socioeconomic, and cumulative consequences of stated impacts.

[90] *See, e.g.*, 17 A.R. No. 1, referenced at *J.A.* 76.

though radiological impacts there were expressed only in curies.[91] The decision to use curies in the *back end* portions of the Original and Interim Rules was similarly well within the Commission's discretion under NEPA and should also have been affirmed.[92]

The lower court instead set aside the Original and Interim Rules on the ground that they precluded individual licensing boards from reading the reported "curies" in terms of health and other environmental values.[93] In so holding, the court below substituted its interpretation of the Original and Interim versions of Table S-3 for that of the Commission.

Nothing on the face of these Rules precludes consideration of the Tables S-3 values in terms of health and other

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[91] *See NRDC I*, 547 F.2d at 647. In another case involving radiological effects, the Tenth Circuit sustained the adequacy of an EIS which reported radiological health effects in terms of annual doses (*i.e.*, man-rems). Manygoats v. Kleppe, 558 F.2d 556 (10th Cir. 1977).

[92] In finding that the Original and Interim Rules failed to permit proper consideration of cumulative and socioeconomic effects, the court relied primarily on two indirectly related statements in the preface of the Final Rule, *see NRDC II*, 685 F.2d at 489 (Bazelon, J.), *Pet. App.* 57a, and did not review the rulemaking record to determine whether the issues had been discussed during the rulemakings, or whether they had been raised with sufficient specificity to require further consideration by the Commission. The closest the court came to confronting the factual record was its finding that "[w]e also cannot accept the argument that the Commission made a factual finding that these fuel cycle effects were insignificant." *NRDC II*, 685 F.2d at 489 n.168 (Bazelon, J.), *Pet. App.* 59a n.168. Had the court consulted the rulemaking record, as was its duty, it would have found that the record shows that the Commission concluded that the cumulative impacts and socioeconomic effects of the fuel cycle were insignificant. *See* NUREG-0116, App. G; NUREG-0216 at 3-5. NEPA does not require disclosure of insignificant impacts. Trout Unlimited v. Morton, 509 F.2d at 1283.

[93] *NRDC II*, 685 F.2d at 490 (Bazelon, J.), *Pet. App.* 60a.

environmental values in individual proceedings. Indeed, the Commission has consistently interpreted the Rules to permit discussion of the meaning of the Tables S-3 values in individual proceedings.[94] It is well established that an agency's interpretation of its own regulations is given "controlling weight" even if it is only one of a number of reasonable interpretations.[95] The Commission's inter-

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[94] The lower court concedes that the amended Interim and Final Rules did not preclude consideration of the meaning of the Table S-3 values in individual licensing proceedings. *See NRDC II*, 685 F.2d at 487-88 (Bazelon, J.), *Pet. App.* 54a-55a. The preface to the Final Rule also notes that the Commission had never previously stated that such discussions were precluded under the Original and Interim Rules, 44 Fed. Reg. 45,364 (1979), *Pet. App.* 350a, and that the reason for the additional clarifying statement was simply to resolve any doubt on this question. 44 Fed. Reg. 45,363 (1979), *Pet. App.* 347a-348a.

In addition, neither the official NRC Reports nor any other NRC licensing-case decision, formally published or not, discloses any instance where parties to licensing proceedings were denied an opportunity to discuss Table S-3 values in terms of their health, socioeconomic, or cumulative consequences. To the contrary, the NRC has expressly permitted separate discussion of radiation-associated health effects, requiring applicants in one case to compare such effects, as associated with an alternative coal-fired plant, to a proposed nuclear plant. *In re* Tennessee Valley Authority (Hartsville Nuclear Plant Units 1A, 2A, 1B and 2B), 5 NRC 92, 103 n.52 (1977). In another reported licensing proceeding, all parties were expressly allowed to file supplemental testimony on the health effects issue. *In re* Public Service Company of Indiana, Inc. (Marble Hill Nuclear Generating Station, Units 1 and 2), 7 NRC 179, 187 (1978). As noted above, in promulgating the Final Rule, the Commission reaffirmed that it had never precluded discussion of health, socioeconomic, and cumulative questions in individual proceedings. 44 Fed. Reg. 45,364 (1979), *Pet. App.* 350a.

[95] *See* Northern Indiana Public Service Co. v. Izaak Walton League, 423 U.S. 12, 15 (1975); Udall v. Tallman, 380 U.S. 1, 16-17 (1965); Power Reactor Development Co. v. International Union of Electrical, Radio, and Machine Workers, 367 U.S. 396, 408 (1961); Bowles v. Seminole Rock and Sand Co., 325 U.S. 410, 413-14 (1945).

pretation of its Original and Interim Rules was reasonable and consistent with its interpretation of the amended Interim and Final Rules. Accordingly, the lower court erred in setting aside the Original and Interim Rules on the grounds that they precluded consideration in individual proceedings of anything beyond the physical impacts listed in Table S-3.

CONCLUSION

The last time this case was before this Court in *Vermont Yankee*, this Court reversed the decision of the D.C. Circuit that NEPA imposed additional procedural requirements in rulemakings conducted under § 553 of the APA. This Court, however, remanded the case to the D.C. Circuit to review the sufficiency of the rulemaking record.[96] This Court directed the D.C. Circuit to focus its review on the "contemporaneous explanation of the agency decision," and not to

> stray beyond the judicial province to explore the procedural format or to impose upon the agency its own notion of which procedures are 'best' or most likely to further some vague, undefined public good.

Vermont Yankee, 435 U.S. at 549 (footnote omitted).

Since this Rule was last before this Court, the Commission has conducted additional, detailed rulemakings.[97] The rulemaking record in this proceeding is voluminous, and contains ample evidence of the NRC's consideration of all facets of the potential environmental impacts underlying the Table S-3 values.[98] The lower court, however, has once again vacated the Table S-3 Rule based on a reading of NEPA which imposes unique restrictions on the NRC's exercise of its rulemaking authority.

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[96] *Vermont Yankee*, 435 U.S. at 549; *supra* text at 15.

[97] *See supra* note 17.

[98] *See supra* note 18.

After over ten years of rulemaking and litigation concerning what is, in itself, a straightforward rulemaking to predict environmental impacts under NEPA, it is time for this proceeding to be laid to rest. As Judge Wilkey explains in his dissenting opinion, the Commission has done an admirable job of supporting its Rule; it has exercised "reasoned decisionmaking;" nothing more could be gained by remanding this case.[99] Thus, while the normal remedy in a proceeding where the Court of Appeals has applied an improper principle of law is to remand the cause to reconsider the record in light of the proper legal standard,[100] the length of this proceeding, the fact that the lower court's opinion was based on a construction of NEPA which this Court can correct, and the presence of a thorough analysis of the substantive basis for the Rule in Judge Wilkey's dissent all suggest that an additional remand to the D.C. Circuit would be both unnecessary and inappropriate.[101]

Neither the Commission, which has by now promulgated three substantially similar versions of the Table S-3 Rule, nor the holders of more than 90 permits issued under the Rule (particularly the five permittees subject to appellate proceedings, *see supra* note 34, specifically predicated on license challenges to the use of the Rule) should be required to run the risk that the court below will once again frustrate the decision of this Court. This Court should reverse the Court below and terminate this

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[99] *NRDC II*, 685 F.2d at 541-43 (Wilkey, J., dissenting), *Pet. App.* 173a-177a.

[100] *See* Universal Camera Corp. v. NLRB, 340 U.S. 474, 491 (1951).

[101] *See* Consolo v. Federal Maritime Comm'n, 383 U.S. 607, 621 (1966); *see also* O'Leary v. Brown-Pacific-Maxon, Inc., 340 U.S. 504, 508 (1951).

litigation by affirming the Original, Interim and Final Rules.

Respectfully submitted,

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